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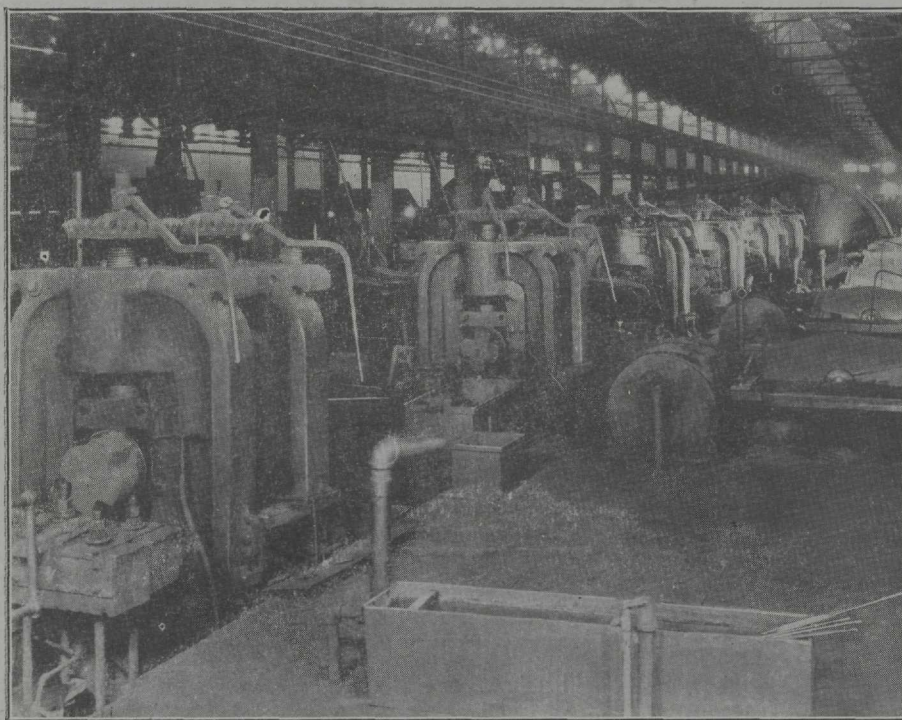
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# THE OHIO STATE ENGINEER



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v. 12, no. 6

Apr. 1929

MEMBER OF ENGINEERING  
COLLEGE MAGAZINES ASSOCIATED

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v. 12 #6





# A New Source of **POWER** . .

The continued industrial expansion of America depends, in a large measure, upon the availability of an ample supply of cheap power.

A most efficient Industrial Steam Cycle is coming into use; a cycle which through the use of high initial steam pressures provides a source of cheap power for any plant using steam for processing.

There has been a definite trend toward the adoption of higher steam pressures in the Public Utility field. Our intimate identification with this development led to the realization that the use of high pressures could be advantageously extended to Industrial plants by generating steam at a pressure sufficiently high to develop the amount of power required, when the turbines or engines are exhausting at a pressure high enough to meet the steam needs for process work. The prime movers thus act as reducing valves and the steam serves a double purpose in its reduction from initial pressure to final exhaust pressure.

The cycle is simple, dependable and economical.


Several installations of this type are already in successful operation. Several more are designed and in course of construction.

This Company has developed, manufactured and installed all types of steam generating equipment covering a wide range of pressures up to 1400 lb. per square inch—and, we are now building units to operate at 1800 lb. pressure. This will be the highest steam pressure in commercial use in America and the plant in which these units are being installed, will be the largest steam plant in the world operating at such a pressure.

The use of high pressures involves many engineering problems which necessitate close coordination of fuel burning and steam generating equipment. As pioneers in the development of complete steam generating units—both stoker and pulverized fuel fired types—Combustion Engineering Corporation is in a position to give valuable counsel to those interested in the economies of high pressure steam.

**COMBUSTION ENGINEERING CORPORATION**  
International Combustion Bldg., 200 Madison Ave., N. Y.

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INTERNATIONAL COMBUSTION ENGINEERING CORPORATION



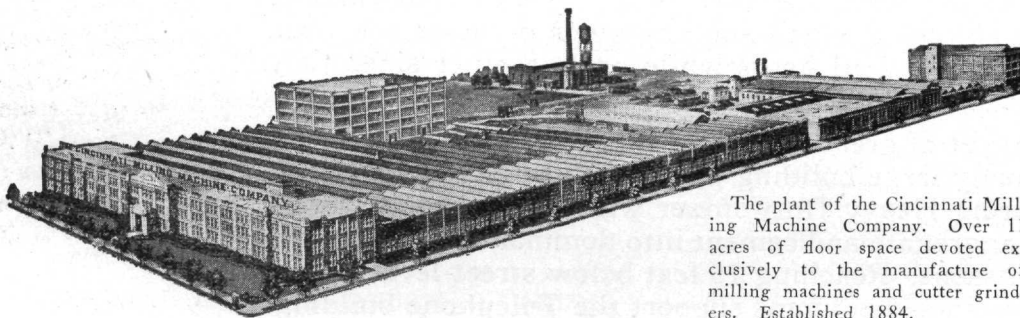


## LEADERSHIP

Cincinnati holds the position of world leadership in the manufacture and marketing of machine tools. There is a greater quantity and variety of machine tools made here than in any other city in the world. Practically an entire manufacturing shop can be equipped with tools that are made in Cincinnati and vicinity.

It is significant that the Cincinnati Milling Machine Company and its associate company, Cincinnati Grinders Incorporated, are leaders in their fields of milling and grinding. Such leadership is deserving of the attention of all *students of engineering*.

It will be worth your time to visit our plant at Oakley and see for yourself this up-to-the-minute organization of men, methods and machines.



The plant of the Cincinnati Milling Machine Company. Over 11 acres of floor space devoted exclusively to the manufacture of milling machines and cutter grinders. Established 1884.

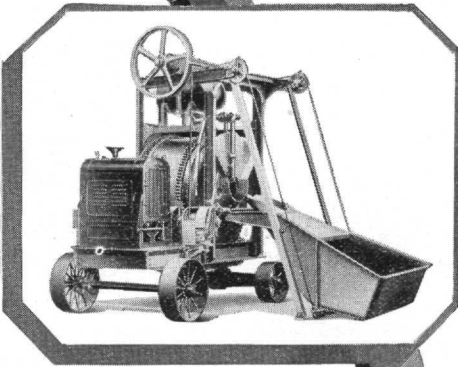
# The Cincinnati Milling Machine Company

Cincinnati, Ohio

»» **CINCINNATI MILLERS** ««



# BUILT ON DOMINANT STRENGTH CONCRETE



Thirty-three stories, the Southwestern Bell Telephone building in Saint Louis towers above the street level. It is the tallest structure in the city and one of the strongest.

Typically American the walls of this imposing building rise in steps called the "set-back" style in construction. On one side of the building the steps occur at the 13th, 17th, 20th and 23rd floors while on two other sides they occur at the 15th, 22nd and 25th floors.

Unseen, yet of great importance, is the foundation. Here, as on many large building projects throughout the world, a Koehring Heavy Duty mixer with its re-mixing action turned aggregate and cement into dominant strength concrete caissons. Reaching 75 feet below street level, 130 of these reinforced columns support the Telephone building.

*Koehring re-mixed concrete is dominant strength concrete.*

## KOEHRING COMPANY

MILWAUKEE, WISCONSIN

*Manufacturers of*

Pavers, Mixers—Gasoline Shovels, Pull Shovels, Cranes and Draglines

*Division of National Equipment Corporation*

*"Concrete—Its Manufacture and Use," a complete treatise and handbook on present methods of preparing and handling portland cement concrete, will be gladly sent on request to engineering students, faculty members and others interested.*



# KOEHRING

APRIL, 1929

# THE OHIO STATE ENGINEER

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*Aerial view of San Francisco*

## A Novelty in '71—A Necessity Today

**A**CCORDING to old records the first passenger elevator in San Francisco was installed in a photographer's gallery on Montgomery Street in 1871.

Time has wrought great changes since then, and the San Francisco of today is a great city with many tall buildings in which Vertical Transportation is a necessity instead of a novelty.

From coast to coast, American cities are constantly growing; populations increase each year, and buildings mount higher and higher. The Otis organization, which pioneered the way with the world's first **safe** elevator, is today meeting the needs of the present and planning to anticipate the requirements of the future.



**OTIS ELEVATOR COMPANY**  
OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD

